### Message

From: Leckner, Erik [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=2A995A6CDBE54FC1BDACFE4212FBD38A-LECKNER, ER]

**Sent**: 3/12/2018 5:35:38 PM

To: Page, Alison [Page.Alison@epa.gov]

Subject: RE: RE: EMP Admin error

### Hello Alison

I'll make this brief. I just want Rakhi to stop with personal attacks such as false claims, interrupting meetings to discuss meetings that I have had impromptu with others on my own things I was solving, etc. That is the very least I am looking to accomplish so it doesn't repeat itself over and over during meetings and emails. Thanks.

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Page, Alison

Sent: Monday, March 12, 2018 9:27 AM

To: Leckner, Erik < Leckner. Erik@usepa.onmicrosoft.com >

Subject: RE: RE: EMP Admin error

## Hi Christian,

Thanks for sending me this. I've been in communications with Ed on this. So, the reality here is that we were rushed into staffing decisions on this project because the timeframe we were given was less than 2 weeks (awful when it comes to recruiting/interviewing). We understand where the problems are but we can't make any staffing change decisions until we have a good handle on the workload.

My understanding is that the Dev server is being set up (or maybe it already is – I'm digging out of 200+ emails from last week) and then we'll be able to begin our sprints. What I would like is to get through a month of sprints to analyze the developer needs; see if you can handle most or all of the workload and maybe a halftime backup is all you need OR if we truly need two full time devs – then we can start making some educated decisions.

Let's circle back on this mid-April to see where we are and discuss workload. Please (since I'm currently swamped) put a meeting on my and Ed's calendar for April 17<sup>th</sup> to discuss again.

Thanks,
Ali Page
ITS-EPA III CSRA
79 TW Alexander Dr, Bld 4401, NC 27713
page.alison@epa.gov | (o) 919.200.7283
http://intranet.epa.gov/webdev

From: Leckner, Erik

**Sent:** Saturday, March 10, 2018 4:26 PM **To:** Page, Alison < <u>Page.Alison@epa.gov</u>> **Subject:** FW: RE: EMP Admin error

Importance: High

Since you weren't apart of the meeting which Ed and I had about the Rakhi concerns, here is what is going on and I really need it to stop.

- 1. Rakhi is interrupting meetings (even team meetings with personal comments).
- 2. Rakhi claimed as you saw in the previous set of emails that I was away when I was working on the latest defect Rob discovered in production. I had already requested from Paula the production logs, discussed with Cindy the defect config issue from WAM/IAM services (apps running in WAM security), analyzed the code, etc etc., yet Rakhi stated I was away.
- 3. Rakhi's experience is minimal. Ed stated that she on leave for several years but the tech stack well preceded those years.
- 4. Rakhi's experience with Full Stack is minimal. Database minimal (almost as if she was more Junior in her previous work than core dev).
- 5. Rakhi's junior comment as you know came out of the blue and demonstrates she has little to no experience on project setup. I can see that most likely other leads setup the environments in her experiences. I have helped her numerous times on even the simplest issues she encountered like not finding jar files (even a basic search in a file explorer would result in the files being found. IF she had looked at the project files she would have seen where they were.
- 6. When I discussed the thread below with her which Rob and I had on Monday, she told me she couldn't figure out that problem on her own even though while it may seem fairly technical below, this is basic stuff for full stack.
- 7. When she asked me about errors in her environment and even their code, she didn't recognize even the simplest of HTML and XML errors (basically Salient made former errors but simple in nature and not really an error but a warning versus an error types of mistakes.
- 8. When we were discussing login to the apps, I mentioned normalization, and she didn't really have any understanding of what it is or denormalization. These are basics before any engineer should be working on code design/hibernate design.
- 9. Even her project setup caused me to have to do what she was doing to reproduce her errors where she was commenting code early on when she shouldn't have. It was fairly interrupting that in itself.

My thoughts almost align with Ed's that she is very overly defensive as Ed stated on that call. This has no part in an engineering environment when we have serious decisions and out of the box solutions to provide. I think it goes further than just that – I think it's a competitive nature she wants to indulge in and even with my first job at Verizon after graduate school, I have never worked with anyone this junior on a project in Fullstack Java, Spring, Hibernate, etc places of work.

Anyways, if you could please discuss with her at your earliest convenience, it would be helpful. Even others are making comments in meetings such as when Cindy had to re-ask Rakhi a very basic topic that Rakhi had sounded misleading. I would like to be out of the loop on this this time around (as Ed and I had already discussed once), but I would like a confirmation that she had been spoken to about this. I am concerned that I am walking on eggshell environment with her.

And her analysis of the previous problem that I was working on for Rob, her approach was very simple and she should have concluded much more even in her preliminary analysis. It was no more than simple QA level of work that she did.

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Thomas, Rob

Sent: Tuesday, March 6, 2018 1:12 PM

To: Leckner, Erik < Leckner. Erik@usepa.onmicrosoft.com >; Campbell, Ed < Campbell. Ed@epa.gov >

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

Hi Christian. Sounds like a winner. Glad you have to experience and know how. (Like a walk in the park). Thanks.

Rob

From: Leckner, Erik

**Sent:** Tuesday, March 6, 2018 1:06 PM

To: Thomas, Rob < Thomas. Rob@epa.gov >; Campbell, Ed < Campbell. Ed@epa.gov >

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>

Subject: RE: RE: EMP Admin error

Hi Rob,

Done it many times before (especially on backup of files where a F500 team had to restore its files) ©

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Thomas, Rob

Sent: Tuesday, March 6, 2018 1:01 PM

To: Leckner, Erik < Leckner. Erik@usepa.onmicrosoft.com>; Campbell, Ed < Campbell. Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

Hi Christian.

It sounds like pure grunt work. Thanks for following through on this.

You're welcome on the call. If it will make life easier... write away. Thanks.

Rob

From: Leckner, Erik

**Sent:** Tuesday, March 6, 2018 12:19 PM

To: Thomas, Rob < Thomas. Rob@epa.gov>; Campbell, Ed < Campbell. Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi < madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

Also note that with the Java source files, they are compiled on the staging server, with no source. All other files such as HTML, JSP, XML, etc. files are not compiled so we can get actual file sizes to compare, whereas for compiled files, I have to compare the compiled sizes (.class\_ files) versus the actual source (of all the .java files).

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Leckner, Erik

Sent: Tuesday, March 6, 2018 12:15 PM

To: Thomas, Rob < Thomas. Rob@epa.gov>; Campbell, Ed < Campbell. Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi,rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

Hi Rob,

Great call on that. Thanks! I think I may write a program to check file by file to check all file sizes so I can have a report should they not match up (other than the basic ones like property files, etc).

Christian Leckner
Principal Engineer
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949-244-6501 | leckner.erik@epa.gov

From: Thomas, Rob

Sent: Tuesday, March 6, 2018 9:36 AM

To: Leckner, Erik < Leckner. Erik@usepa.onmicrosoft.com>; Campbell, Ed < Campbell. Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi < madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>

Subject: RE: RE: EMP Admin error

Hey Christian.

If we don't have an emergency, let's wait till Wednesday meeting to find out how long it will take them bring the Dev Server online. If we don't have all files from Salient, we may have serious issues, if the files don't match up precisely. Thanks.

Rob

From: Leckner, Erik

Sent: Monday, March 5, 2018 5:39 PM

To: Thomas, Rob < Thomas. Rob@epa.gov >; Campbell, Ed < Campbell. Ed@epa.gov >

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>

Subject: RE: RE: EMP Admin error

Hi Rob,

Thanks.

For solution (i), the way in which security is being handled is not typical currently. Typically, Ajax calls should return HTTP return status codes, such as in this case, a 302, 401 or 403, etc.. This is perhaps why they didn't provide the HTTP status code and url redirect for re-authentication.

From an online discussion on this topic from [https://stackoverflow.com/questions/8775593/is-it-possible-to-send-a-401-unauthorized-and-redirect-with-a-location]:

I'm coming in very late here but I thought I'd add my two cents. As I understand it, the desire is to indicate that the user doesn't have the correct authorization and to prompt them to log in. Rudie understandably would like to return 401 Unauthorized (because the user needs to authorize by some mechanism, eg. logging in), and also forward them to the login page - but this is not very easy to accomplish and isn't supported out-of-the-box by most libraries. One solution is to display the login page in the body of the 401 response, as was suggested in another answer. However, let me take a look at this from the perspective of established/best practice.

#### Test case 1: Facebook

Navigating to a protected Facebook page (my user profile) while logged out results in a 404 Not Found response. Facebook serves up a general purpose "this page is not available" page, which also includes a login form. Interesting. Even more interesting: when I navigate to the "events" page, I'm served a 302 response which forwards to a login page (which returns a 200 response). So I guess their idea is to return 302 for pages that we *know* exist, but serve 404 for pages which may or may not exist (eg. to protect a user's privacy).

### Test case 2: Google Inbox

Navigating to my inbox when I am logged out returns 302 and forwards me to a login page, similar to Facebook. I wasn't able to figure out how to make my Google+ profile private so no test data there...

#### Test case 3: Amazon.com

Navigating to my order history when I am logged out returns 302 and forwards me to a login page as before. Amazon has no concept of a "profile" page so I can't test that here either.

To summarize the test cases here, it seems to be best practice to return a 302 Found and forward to a login page if the user needs to log in (although I would argue 303 See Other is actually more appropriate). This is of course just in the case where a real human user needs to input a username and password in an html form. For other types of authentication (eg. basic, api key, etc.), 401 Unauthorized is obviously the appropriate response. In this case there is no need to forward to a login page.

[https://stackoverflow.com/questions/8775593/is-it-possible-to-send-a-401-unauthorized-and-redirect-with-a-location]

The HTTP response status code **302 Found** is what Google Inbox and Amazon.com does whenever performing URL redirection. An HTTP response with the 302 status code will additionally provide a URL in the header field location.

This would require further exploration how the empadmin *server* application and associated applications like fr, equipment currently replies in different cases, etc. Supposing that the security framework isn't currently providing the means to do this without a overhaul on the server side, (ii) would be using some logic that isn't standard (such as what Google, Chase, etc all do today).

For (i), yes, they didn't handle it other than just a popup alert with the html page itself. Usersearch placed it inline and had instructed the server on the Ajax call to return HTML.

As for dev environment or only deploying a few files until we have dev server, which deployment method are you suggesting that we do:

- 1. Wait for the dev environment to be setup and then we can deploy examine file by file that the war files are the same as where Salient had left off; or
- 2. Deploy individual files (and keep note which files changed until we have a chance to test on a stable dev environment). In this approach, I would just deploy those files, and make a copy of what currently is on Staging and overwrite the files which have changed. Since we don't yet have a dev environment other than locally, and security things like cookie generation seem to be an issue without testing to see whether this occurs on a dev

Linux box), we could deploy the entire war but it could be risky if the files left for us from Salient don't match up precisely with what is on staging currently.

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Thomas, Rob

Sent: Monday, March 5, 2018 4:57 PM

To: Leckner, Erik < Leckner. Erik@usepa.onmicrosoft.com >; Campbell, Ed < Campbell. Ed@epa.gov >

Cc: Madhavan Nair Kamala Devi, Rakhi < madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

Hello Christian.

Then let's walk that way. I'm familiar with those applications. We should investigate those other applications in the application suite.

The first solution works. Because the Dev Server will be our Dev Environment. NCC ADC Team is having heartburn about us doing Dev Environment on a Staging Server. Can't slip hairs when issues arise.  $\otimes$  That's all sounds great and standard ops, can't wait. Yeah that master repository would have worked wonders.

For: (iii) is how it currently done for userSearch, which could also be replaced with (ii). Let's verify and replace "userSearch" with (ii).

For Solution (i) they rolled the dice and fortunately didn't crap out. 

Thanks all.

Rob

From: Leckner, Erik

**Sent:** Monday, March 5, 2018 4:48 PM

To: Thomas, Rob < Thomas. Rob@epa.gov>; Campbell, Ed < Campbell. Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>

Subject: RE: RE: EMP Admin error

Hello Rob

Yes, (ii) is the right way to go (such as what you see in other applications like yahoo, Chase, Gmail, etc.). Note that this could apply to many other cases in the application set (empadmin, fr, etc) where they just popup an alert that an error occurred without determining what the actual error is.

I could deploy just the solution as page(s) until we get a dev environment, or we can first fully test our deployment on a new dev server before deploying to staging, etc. as it was done by Salient, etc. Once we do get a dev server, I/we can test in that environment and then freeze to a new Subversion repository (source code control) - since we weren't given the Subversion master repository (history of source control from the master) from Salient.

(iii) is how it currently done for userSearch, which could also be replaced with (ii).

Solution (i) still needs to detect that it is a session/logout issue versus an application error and I think that is why they didn't go with that approach in other areas of the application (in the way that security operates in the application today). For usersearch they just inlined the html message which happens to the be the login/proceed page.

Christian Leckner
Principal Engineer
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San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Thomas, Rob

Sent: Monday, March 5, 2018 4:36 PM

To: Leckner, Erik < Leckner. Erik@usepa.onmicrosoft.com >; Campbell, Ed < Campbell. Ed@epa.gov >

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

## Great Work Christian.

I chose (ii). But if (i) works with little headache... we could do that too.

In regards to your note:

"Note that it would be nice to have access to production and staging logs, and once we have a dev server, we can run these types of tests before deployment. For a quick turn-around, we could just load deploy the pages which have issues with their resolutions."

If Ed hasn't told you already, we are working with NCC to get a Dev Environment, most likely on another server. We also have to clean up/remove unneeded Instances on Application and Database servers in Production & Staging Environments. EMP is a little bloated. Not to mention tame the wild stampede of web services.

Thanks.

Rob

From: Leckner, Erik

**Sent:** Monday, March 5, 2018 4:24 PM

To: Thomas, Rob < Thomas. Rob@epa.gov>; Campbell, Ed < Campbell. Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi < madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>

Subject: RE: RE: EMP Admin error

Note that (i) below – the application currently doesn't instruct the user to re-login, just an generic error message is presented to the user in the form of a popup alert such as: "Error detected...", "Error while...", etc. although the application could just as well presented an alert for the user to re-login.

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Leckner, Erik

Sent: Monday, March 5, 2018 4:16 PM

To: Thomas, Rob < Thomas.Rob@epa.gov>; Campbell, Ed < Campbell.Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi < madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

Importance: High

Hello Rob et al.

So, I did a little exploration and noticed that other similar types of errors due to session logout/timeout were handled differently. For example, for user search in the same conditions as discussed in previous emails, the code displays the returned login page within the page itself (which Rob saw as an alert for getting groups for a particular application id). So, as previously noted, we could do one of the following:

- i) Display a message for the user to re-login;
- ii) Add an Ajax error handler to handle these types of events by redirecting the user to re-authenticate (i.e. login page).
- iii) Do as it is done for user search in same page by displaying inline the login page.

ii) is my recommended approach, both (i) and (iii) is how it is done currently for other areas of the application, with (iii) for user search on the same page.

What Rob saw erroneously as a popup alert was the actual login page with a parser error (where the page was expecting ison but received a html/text page instead).

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Leckner, Erik

**Sent:** Monday, March 5, 2018 3:07 PM

To: Thomas, Rob < Thomas. Rob@epa.gov>; Campbell, Ed < Campbell. Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>

Subject: RE: RE: EMP Admin error

Importance: High

Hi Rob et al.

As promised, I was easily able to reproduce the error by:

Opening another tab/window in Chrome (this issue is independent of browser/version) and logout in that tab. Then select the application (id) and the error will occur. See below.

# **Deliberative Process / Ex. 5**

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Leckner, Erik

**Sent:** Monday, March 5, 2018 2:54 PM

To: Thomas, Rob < Thomas.Rob@epa.gov>; Campbell, Ed < Campbell.Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>
Subject: RE: EMP Admin error

Importance: High

Hello Rob et al.,

The issue appears to be the following:

An Ajax call is made to the epmadmin application server. Since the user's session has expired, the asynchronous call returns an error. The UI, in response to the error returned, displays a Javascript alert popup message to the user.

## **Deliberative Process / Ex. 5**

## **Deliberative Process / Ex. 5**

I suspect that this isn't the only place that this type of error exists in the application.

This could be resolved by one of the following:

- i) Display a message for the user to re-login;
- ii) Add an Ajax error handler to handle these types of events by redirecting the user to re-authenticate (i.e. login page).

Most likely, I can reproduce this type of error, by logging out in another window and attempt to execute the same Ajax call from the original window.

Note that it would be nice to have access to production and staging logs, and once we have a dev server, we can run these types of tests before deployment. For a quick turn-around, we could just load deploy the pages which have issues with their resolutions.

Best,

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

## Hey Ed.

Thanks for looking into this. I did use "Snipping Tool" just didn't split it in two. © I used IE also.. I think the issue boiled down to the time-out and the re-logging in screen. It obviously put in to the EMPAdmin but my access was limited until I went to the (base) log in page to enter EMP again. Maybe that's were we should look.

Rob Thomas
Sent from Mail for Windows 10

From: Fan, Cindy (Yangian)

Sent: Monday, March 5, 2018 12:39:10 PM

To: Campbell, Ed; Thomas, Rob

Cc: Leckner, Erik; Madhavan Nair Kamala Devi, Rakhi

Subject: RE: EMP Admin error

Yes, I used IE with version 11.909.15063.0.

From: Campbell, Ed

**Sent:** Monday, March 5, 2018 12:37 PM

To: Thomas, Rob < Thomas. Rob@epa.gov>

Cc: Leckner, Erik < Leckner.Erik@usepa.onmicrosoft.com >; Fan, Cindy (Yanqian) < fan.yanqian@epa.gov >; Madhavan Nair

Kamala Devi, Rakhi < madhavan-nair-kamala-devi.rakhi@epa.gov>

**Subject:** RE: EMP Admin error

Hey Rob,

Quick notes, and I'm adding the team who had input thus far.

- 1. Cindy was not able to reproduce the error, which is good. Perhaps this is a browser issue? Cindy, you were using IE, correct?
- 2. Rakhi and Christian were wondering if you could produce a slightly higher resolution screen grab of the error? Maybe just use snipping to grab the top half of it, and send a second email with the lower half if needed?

Thanks,

Ed Campbell ITS-EPA III CSRA 79 TW Alexander Dr, Bld 4401, NC 27713 campbell.ed@epa.gov | (o) 919.200.7243 http://intranet.epa.gov/webdev

From: Thomas, Rob

Sent: Monday, March 05, 2018 11:28 AM

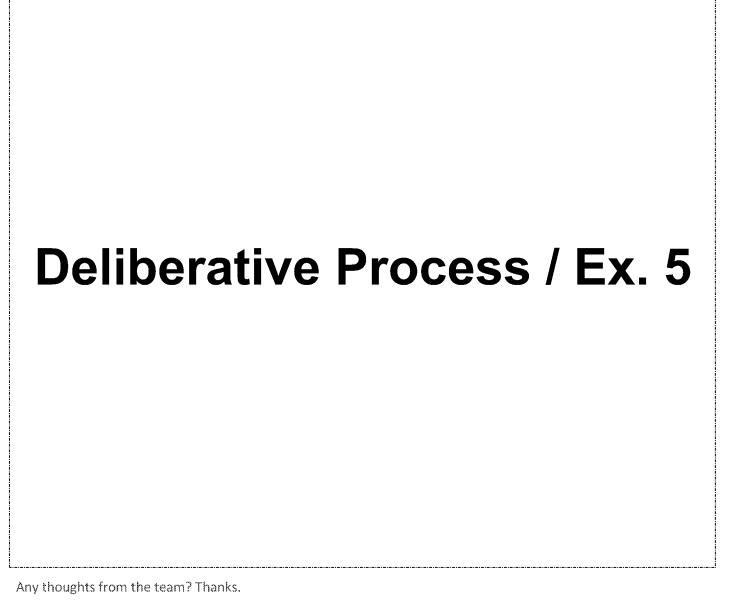
To: Campbell, Ed <<u>Campbell,Ed@epa.gov</u>>

Cc: EMP Helpdesk <<u>EMP\_Helpdesk@epa.gov</u>>

**Subject:** EMP Admin error

Hi Ed.

This happened when I tried to look at groups in EMPAdmin.



Regards,

Rob Thomas | w: 202.564.7507 | c: 202.697.0474 | fx: 202.564.8731 | US EPA | OLEM, OEM | Emergency Management Portal: System Owner/COR/PM | ISSO | FITARA Lead | MAAC Prioritization Rep

### Message

From: Leckner, Erik [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=2A995A6CDBE54FC1BDACFE4212FBD38A-LECKNER, ER]

**Sent**: 3/12/2018 6:26:06 PM

To: Page, Alison [Page.Alison@epa.gov]

Subject: RE: RE: EMP Admin error

Hi Alison,

Sure, I am sure I can handle all the workload for the time being. We could always add a ½ time resource, etc. The current issue has been with Rakhi's attempts to interrupt meetings with strange off the wall comments and emails (and with even Rob on those emails it's quite troublesome and makes CSRA look bad just like the missing files, etc.).

Thanks.

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Page, Alison

Sent: Monday, March 12, 2018 9:27 AM

**To:** Leckner, Erik <Leckner.Erik@usepa.onmicrosoft.com>

Subject: RE: RE: EMP Admin error

Hi Christian,

Thanks for sending me this. I've been in communications with Ed on this. So, the reality here is that we were rushed into staffing decisions on this project because the timeframe we were given was less than 2 weeks (awful when it comes to recruiting/interviewing). We understand where the problems are but we can't make any staffing change decisions until we have a good handle on the workload.

My understanding is that the Dev server is being set up (or maybe it already is – I'm digging out of 200+ emails from last week) and then we'll be able to begin our sprints. What I would like is to get through a month of sprints to analyze the developer needs; see if you can handle most or all of the workload and maybe a halftime backup is all you need OR if we truly need two full time devs – then we can start making some educated decisions.

Let's circle back on this mid-April to see where we are and discuss workload. Please (since I'm currently swamped) put a meeting on my and Ed's calendar for April 17<sup>th</sup> to discuss again.

Thanks,
Ali Page
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page.alison@epa.gov | (o) 919.200.7283
http://intranet.epa.gov/webdev

From: Leckner, Erik

**Sent:** Saturday, March 10, 2018 4:26 PM **To:** Page, Alison < <u>Page. Alison@epa.gov</u>>

Subject: FW: RE: EMP Admin error

Importance: High

Hi Ali

Since you weren't apart of the meeting which Ed and I had about the Rakhi concerns, here is what is going on and I really need it to stop.

- 1. Rakhi is interrupting meetings (even team meetings with personal comments).
- 2. Rakhi claimed as you saw in the previous set of emails that I was away when I was working on the latest defect Rob discovered in production. I had already requested from Paula the production logs, discussed with Cindy the defect config issue from WAM/IAM services (apps running in WAM security), analyzed the code, etc etc., yet Rakhi stated I was away.
- 3. Rakhi's experience is minimal. Ed stated that she on leave for several years but the tech stack well preceded those years.
- 4. Rakhi's experience with Full Stack is minimal. Database minimal (almost as if she was more Junior in her previous work than core dev).
- 5. Rakhi's junior comment as you know came out of the blue and demonstrates she has little to no experience on project setup. I can see that most likely other leads setup the environments in her experiences. I have helped her numerous times on even the simplest issues she encountered like not finding jar files (even a basic search in a file explorer would result in the files being found. IF she had looked at the project files she would have seen where they were.
- 6. When I discussed the thread below with her which Rob and I had on Monday, she told me she couldn't figure out that problem on her own even though while it may seem fairly technical below, this is basic stuff for full stack.
- 7. When she asked me about errors in her environment and even their code, she didn't recognize even the simplest of HTML and XML errors (basically Salient made former errors but simple in nature and not really an error but a warning versus an error types of mistakes.
- 8. When we were discussing login to the apps, I mentioned normalization, and she didn't really have any understanding of what it is or denormalization. These are basics before any engineer should be working on code design/hibernate design.
- 9. Even her project setup caused me to have to do what she was doing to reproduce her errors where she was commenting code early on when she shouldn't have. It was fairly interrupting that in itself.

My thoughts almost align with Ed's that she is very overly defensive as Ed stated on that call. This has no part in an engineering environment when we have serious decisions and out of the box solutions to provide. I think it goes further than just that – I think it's a competitive nature she wants to indulge in and even with my first job at Verizon after graduate school, I have never worked with anyone this junior on a project in Fullstack Java, Spring, Hibernate, etc places of work.

Anyways, if you could please discuss with her at your earliest convenience, it would be helpful. Even others are making comments in meetings such as when Cindy had to re-ask Rakhi a very basic topic that Rakhi had sounded misleading. I would like to be out of the loop on this this time around (as Ed and I had already discussed once), but I would like a confirmation that she had been spoken to about this. I am concerned that I am walking on eggshell environment with her.

And her analysis of the previous problem that I was working on for Rob, her approach was very simple and she should have concluded much more even in her preliminary analysis. It was no more than simple QA level of work that she did.

Christian Leckner Principal Engineer ITS-EPA | CSRA San Diego, CA 92028 | PDT 949-244-6501 | leckner.erik@epa.gov

From: Thomas, Rob

Sent: Tuesday, March 6, 2018 1:12 PM

To: Leckner, Erik <Leckner.Erik@usepa.onmicrosoft.com>; Campbell, Ed <Campbell.Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>

Subject: RE: RE: EMP Admin error

Hi Christian. Sounds like a winner. Glad you have to experience and know how. (Like a walk in the park). Thanks.

Rob

From: Leckner, Erik

**Sent:** Tuesday, March 6, 2018 1:06 PM

To: Thomas, Rob < Thomas.Rob@epa.gov >; Campbell, Ed < Campbell.Ed@epa.gov >

Cc: Madhavan Nair Kamala Devi, Rakhi < madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

Hi Rob,

Done it many times before (especially on backup of files where a F500 team had to restore its files) ©

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Thomas, Rob

Sent: Tuesday, March 6, 2018 1:01 PM

To: Leckner, Erik < Leckner. Erik@usepa.onmicrosoft.com >; Campbell, Ed < Campbell. Ed@epa.gov >

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

Hi Christian.

It sounds like pure grunt work. Thanks for following through on this.

You're welcome on the call. If it will make life easier... write away. Thanks.

Rob

From: Leckner, Erik

Sent: Tuesday, March 6, 2018 12:19 PM

To: Thomas, Rob < Thomas. Rob@epa.gov >; Campbell, Ed < Campbell. Ed@epa.gov >

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>

Subject: RE: RE: EMP Admin error

Also note that with the Java source files, they are compiled on the staging server, with no source. All other files such as HTML, JSP, XML, etc. files are not compiled so we can get actual file sizes to compare, whereas for compiled files, I have to compare the compiled sizes (.class\_ files) versus the actual source (of all the .java files).

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Leckner, Erik

Sent: Tuesday, March 6, 2018 12:15 PM

To: Thomas, Rob < Thomas.Rob@epa.gov>; Campbell, Ed < Campbell.Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi < madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

Hi Rob,

Great call on that. Thanks! I think I may write a program to check file by file to check all file sizes so I can have a report should they not match up (other than the basic ones like property files, etc).

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Thomas, Rob

Sent: Tuesday, March 6, 2018 9:36 AM

To: Leckner, Erik < Leckner. Erik@usepa.onmicrosoft.com >; Campbell, Ed < Campbell. Ed@epa.gov >

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>

Subject: RE: RE: EMP Admin error

Hey Christian.

If we don't have an emergency, let's wait till Wednesday meeting to find out how long it will take them bring the Dev Server online. If we don't have all files from Salient, we may have serious issues, if the files don't match up precisely. Thanks.

Rob

From: Leckner, Erik

Sent: Monday, March 5, 2018 5:39 PM

To: Thomas, Rob < Thomas. Rob@epa.gov>; Campbell, Ed < Campbell. Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>

Subject: RE: RE: EMP Admin error

Hi Rob,

Thanks.

For solution (i), the way in which security is being handled is not typical currently. Typically, Ajax calls should return HTTP return status codes, such as in this case, a 302, 401 or 403, etc.. This is perhaps why they didn't provide the HTTP status code and url redirect for re-authentication.

From an online discussion on this topic from [https://stackoverflow.com/questions/8775593/is-it-possible-to-send-a-401-unauthorized-and-redirect-with-a-location]:

I'm coming in very late here but I thought I'd add my two cents. As I understand it, the desire is to indicate that the user doesn't have the correct authorization and to prompt them to log in. Rudie understandably would like to return 401 Unauthorized (because the user needs to authorize by some mechanism, eg. logging in), and also forward them to the login page – but this is not very easy to accomplish and isn't supported out-of-the-box by most libraries. One solution is to display the login page in the body of the 401 response, as was suggested in another answer. However, let me take a look at this from the perspective of established/best practice.

#### Test case 1: Facebook

Navigating to a protected Facebook page (my user profile) while logged out results in a 404 Not Found response. Facebook serves up a general purpose "this page is not available" page, which also includes a login form. Interesting. Even more interesting: when I navigate to the "events" page, I'm served a 302 response which forwards to a login page (which returns a 200 response). So I guess their idea is to return 302 for pages that we *know* exist, but serve 404 for pages which may or may not exist (eg. to protect a user's privacy).

## Test case 2: Google Inbox

Navigating to my inbox when I am logged out returns 302 and forwards me to a login page, similar to Facebook. I wasn't able to figure out how to make my Google+ profile private so no test data there...

### Test case 3: Amazon.com

Navigating to my order history when I am logged out returns 302 and forwards me to a login page as before. Amazon has no concept of a "profile" page so I can't test that here either.

To summarize the test cases here, it seems to be best practice to return a 302 Found and forward to a login page if the user needs to log in (although I would argue 303 See Other is actually more appropriate). This is of course just in the case where a real human user needs to input a username and password in an html form. For other types of authentication (eg. basic, api key, etc.), 401 Unauthorized is obviously the appropriate response. In this case there is no need to forward to a login page.

[https://stackoverflow.com/questions/8775593/is-it-possible-to-send-a-401-unauthorized-and-redirect-with-a-location]

The HTTP response status code **302 Found** is what Google Inbox and Amazon.com does whenever performing URL redirection. An HTTP response with the 302 status code will additionally provide a URL in the header field location.

This would require further exploration how the empadmin *server* application and associated applications like fr, equipment currently replies in different cases, etc. Supposing that the security framework isn't currently providing the means to do this without a overhaul on the server side, (ii) would be using some logic that isn't standard (such as what Google, Chase, etc all do today).

For (i), yes, they didn't handle it other than just a popup alert with the html page itself. Usersearch placed it inline and had instructed the server on the Ajax call to return HTML.

As for dev environment or only deploying a few files until we have dev server, which deployment method are you suggesting that we do:

- 1. Wait for the dev environment to be setup and then we can deploy examine file by file that the war files are the same as where Salient had left off; or
- 2. Deploy individual files (and keep note which files changed until we have a chance to test on a stable dev environment). In this approach, I would just deploy those files, and make a copy of what currently is on Staging and overwrite the files which have changed. Since we don't yet have a dev environment other than locally, and

security things like cookie generation seem to be an issue without testing to see whether this occurs on a dev Linux box), we could deploy the entire war but it could be risky if the files left for us from Salient don't match up precisely with what is on staging currently.

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Thomas, Rob

Sent: Monday, March 5, 2018 4:57 PM

To: Leckner, Erik < Leckner. Erik@usepa.onmicrosoft.com >; Campbell, Ed < Campbell. Ed@epa.gov >

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

Hello Christian.

Then let's walk that way. I'm familiar with those applications. We should investigate those other applications in the application suite.

The first solution works. Because the Dev Server will be our Dev Environment. NCC ADC Team is having heartburn about us doing Dev Environment on a Staging Server. Can't slip hairs when issues arise. ⊗ That's all sounds great and standard ops, can't wait. Yeah that master repository would have worked wonders.

For: (iii) is how it currently done for userSearch, which could also be replaced with (ii). Let's verify and replace "userSearch" with (ii).

For Solution (i) they rolled the dice and fortunately didn't crap out. 

Thanks all.

Rob

From: Leckner, Erik

Sent: Monday, March 5, 2018 4:48 PM

To: Thomas, Rob < Thomas.Rob@epa.gov>; Campbell, Ed < Campbell.Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi < madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

Hello Rob

Yes, (ii) is the right way to go (such as what you see in other applications like yahoo, Chase, Gmail, etc.). Note that this could apply to many other cases in the application set (empadmin, fr, etc) where they just popup an alert that an error occurred without determining what the actual error is.

I could deploy just the solution as page(s) until we get a dev environment, or we can first fully test our deployment on a new dev server before deploying to staging, etc. as it was done by Salient, etc. Once we do get a dev server, I/we can test in that environment and then freeze to a new Subversion repository (source code control) - since we weren't given the Subversion master repository (history of source control from the master) from Salient.

(iii) is how it currently done for userSearch, which could also be replaced with (ii).

Solution (i) still needs to detect that it is a session/logout issue versus an application error and I think that is why they didn't go with that approach in other areas of the application (in the way that security operates in the application today). For usersearch they just inlined the html message which happens to the be the login/proceed page.

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Thomas, Rob

Sent: Monday, March 5, 2018 4:36 PM

To: Leckner, Erik <Leckner.Erik@usepa.onmicrosoft.com>; Campbell, Ed <Campbell.Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>

Subject: RE: RE: EMP Admin error

## Great Work Christian.

I chose (ii). But if (i) works with little headache... we could do that too.

In regards to your note:

"Note that it would be nice to have access to production and staging logs, and once we have a dev server, we can run these types of tests before deployment. For a quick turn-around, we could just load deploy the pages which have issues with their resolutions."

If Ed hasn't told you already, we are working with NCC to get a Dev Environment, most likely on another server. We also have to clean up/remove unneeded Instances on Application and Database servers in Production & Staging Environments. EMP is a little bloated. Not to mention tame the wild stampede of web services.

Thanks.

Rob

From: Leckner, Erik

Sent: Monday, March 5, 2018 4:24 PM

To: Thomas, Rob <Thomas.Rob@epa.gov>; Campbell, Ed <Campbell.Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi < madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

Note that (i) below – the application currently doesn't instruct the user to re-login, just an generic error message is presented to the user in the form of a popup alert such as: "Error detected...", "Error while...", etc. although the application could just as well presented an alert for the user to re-login.

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Leckner, Erik

Sent: Monday, March 5, 2018 4:16 PM

To: Thomas, Rob < Thomas.Rob@epa.gov>; Campbell, Ed < Campbell.Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi < madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yangian@epa.gov>

Subject: RE: RE: EMP Admin error

Importance: High

Hello Rob et al.

So, I did a little exploration and noticed that other similar types of errors due to session logout/timeout were handled differently. For example, for user search in the same conditions as discussed in previous emails, the code displays the returned login page within the page itself (which Rob saw as an alert for getting groups for a particular application id). So, as previously noted, we could do one of the following:

- i) Display a message for the user to re-login;
- ii) Add an Ajax error handler to handle these types of events by redirecting the user to re-authenticate (i.e. login page).
- iii) Do as it is done for user search in same page by displaying inline the login page.

ii) is my recommended approach, both (i) and (iii) is how it is done currently for other areas of the application, with (iii) for user search on the same page.

What Rob saw erroneously as a popup alert was the actual login page with a parser error (where the page was expecting ison but received a html/text page instead).

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Leckner, Erik

**Sent:** Monday, March 5, 2018 3:07 PM

To: Thomas, Rob < Thomas. Rob@epa.gov>; Campbell, Ed < Campbell. Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>

Subject: RE: RE: EMP Admin error

Importance: High

Hi Rob et al.

As promised, I was easily able to reproduce the error by:

Opening another tab/window in Chrome (this issue is independent of browser/version) and logout in that tab. Then select the application (id) and the error will occur. See below.

## **Deliberative Process / Ex. 5**

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

From: Leckner, Erik

**Sent:** Monday, March 5, 2018 2:54 PM

To: Thomas, Rob < Thomas.Rob@epa.gov>; Campbell, Ed < Campbell.Ed@epa.gov>

Cc: Madhavan Nair Kamala Devi, Rakhi <madhavan-nair-kamala-devi.rakhi@epa.gov>; Fan, Cindy (Yanqian)

<fan.yanqian@epa.gov>
Subject: RE: EMP Admin error

Importance: High

Hello Rob et al.,

The issue appears to be the following:

An Ajax call is made to the epmadmin application server. Since the user's session has expired, the asynchronous call returns an error. The UI, in response to the error returned, displays a Javascript alert popup message to the user.

# **Deliberative Process / Ex. 5**

# **Deliberative Process / Ex. 5**

I suspect that this isn't the only place that this type of error exists in the application.

This could be resolved by one of the following:

- i) Display a message for the user to re-login;
- ii) Add an Ajax error handler to handle these types of events by redirecting the user to re-authenticate (i.e. login page).

Most likely, I can reproduce this type of error, by logging out in another window and attempt to execute the same Ajax call from the original window.

Note that it would be nice to have access to production and staging logs, and once we have a dev server, we can run these types of tests before deployment. For a quick turn-around, we could just load deploy the pages which have issues with their resolutions.

Best,

Christian Leckner
Principal Engineer
ITS-EPA | CSRA
San Diego, CA 92028 | PDT
949-244-6501 | leckner.erik@epa.gov

Hey Ed.

Thanks for looking into this. I did use "Snipping Tool" just didn't split it in two. ① I used IE also.. I think the issue boiled down to the time-out and the re-logging in screen. It obviously put in to the EMPAdmin but my access was limited until I went to the (base) log in page to enter EMP again. Maybe that's were we should look.

Rob Thomas
Sent from Mail for Windows 10

From: Fan, Cindy (Yangian)

Sent: Monday, March 5, 2018 12:39:10 PM

To: Campbell, Ed; Thomas, Rob

Cc: Leckner, Erik; Madhavan Nair Kamala Devi, Rakhi

Subject: RE: EMP Admin error

Yes, I used IE with version 11.909.15063.0.

From: Campbell, Ed

**Sent:** Monday, March 5, 2018 12:37 PM

To: Thomas, Rob < Thomas. Rob@epa.gov>

Cc: Leckner, Erik < Leckner.Erik@usepa.onmicrosoft.com>; Fan, Cindy (Yanqian) < fan.yanqian@epa.gov>; Madhavan Nair

Kamala Devi, Rakhi < madhavan-nair-kamala-devi.rakhi@epa.gov>

**Subject:** RE: EMP Admin error

Hey Rob,

Quick notes, and I'm adding the team who had input thus far.

- 1. Cindy was not able to reproduce the error, which is good. Perhaps this is a browser issue? Cindy, you were using IE, correct?
- 2. Rakhi and Christian were wondering if you could produce a slightly higher resolution screen grab of the error? Maybe just use snipping to grab the top half of it, and send a second email with the lower half if needed?

Thanks,

Ed Campbell ITS-EPA III CSRA 79 TW Alexander Dr, Bld 4401, NC 27713 campbell.ed@epa.gov | (o) 919.200.7243 http://intranet.epa.gov/webdev

From: Thomas, Rob

Sent: Monday, March 05, 2018 11:28 AM

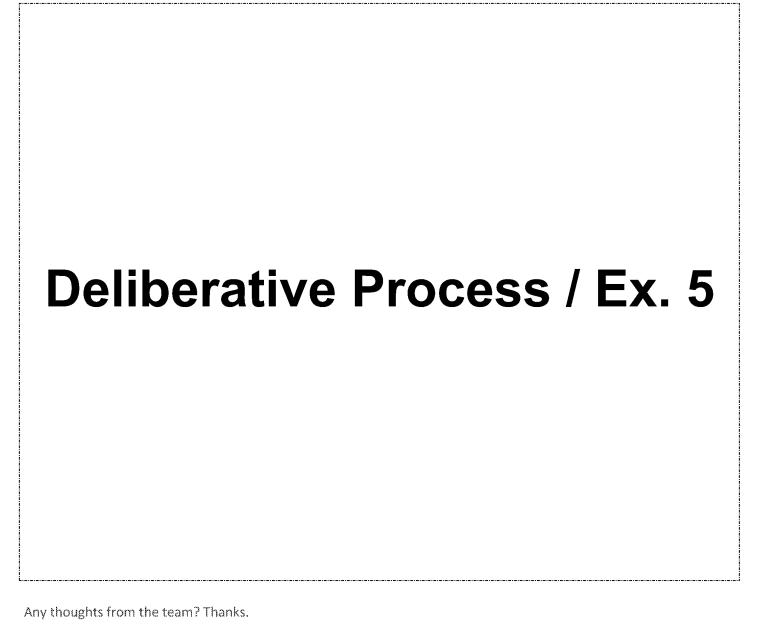
To: Campbell, Ed <<u>Campbell,Ed@epa.gov</u>>

Cc: EMP Helpdesk <<u>EMP\_Helpdesk@epa.gov</u>>

**Subject:** EMP Admin error

Hi Ed.

This happened when I tried to look at groups in EMPAdmin.



Regards,

Rob Thomas | w: 202.564.7507 | c: 202.697.0474 | fx: 202.564.8731 | US EPA | OLEM, OEM | Emergency Management Portal: System Owner/COR/PM | ISSO | FITARA Lead | MAAC Prioritization Rep